BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2019-393-E

IN RE: Application of Dominion Energy South Carolina, Incorporated for Approval of "Storage Tariff" (Technology-Neutral Avoided Cost Rates for Energy and Capacity for Dispatchable Renewable Generating Facilities)	)))))))	**SURREBUTTAL TESTIMONY OF RONALD DIFELICE ON BEHALF OF SOUTH CAROLINA SOLAR BUSINESS ALLIANCE, INC.**

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. Please state your name and business address.

A. My name is Ronald DiFelice, and my business address is 101 N. Columbia St, Ste 200, Chapel Hill, NC 27514.

Q. Are you the same Ronald DiFelice that offered direct testimony in this docket?

A. Yes. My direct testimony was filed on behalf of the South Carolina Solar Business Alliance, Inc. ("SBA").

Q. What is the purpose of you surrebuttal testimony?

A. My surrebuttal testimony will be in response to the rebuttal testimony of Daniel Kassis and Eric Bell that was filed on behalf of Dominion Energy South Carolina, Inc. ("DESC" or "the Company").

I. Responses to Witness Kassis

Q. Do you agree with the characterization by Witness Kassis that your direct testimony calls for DESC to subsidize Storage Facilities?

A. No. I believe that the tariff should accurately reflect the value of the Storage Facility to the DESC system.

Q. Do you agree with Witness Kassis that the generating capacity of a storage resource should be calculated separately from the Solar QF?

A. No. As reflected in Exhibit SBA/RF-1 and SBA/RF-2, a solar facility that includes energy storage equipment that is charged exclusively from the solar facility is, and should be considered, as a single qualifying facility and not two separate qualifying facilities. In this

scenario, where the solar facility, including its storage equipment, is incapable of discharging greater instantaneous output to the grid than the nameplate capacity of the solar facility, the storage equipment is simply a component of the qualifying (solar generation) facility, not a separate small generator within the meaning of PURPA. Therefore, the 1-mile rule relating to the co-location of nominally distinct facilities is not applicable. The whole purpose of the 1-mile rule is to prevent developers from artificially disaggregating a single facility in order to circumvent PURPA's eligibility cap on QF nameplate capacity. Where a solar facility with storage equipment is designed to operate within a defined nameplate capacity, the purpose of the 1-mile rule does not come into play. Additionally, the DC rating of a solar facility is not determinative of QF status. Operating solar facilities in South Carolina, including facilities interconnected to the DESC system, with a DC rating above the 80MW PURPA QF certification threshold are evaluated based on their AC rating. Incorporating storage equipment into an 80MW-AC solar facility that will be charged exclusively from the solar facility and that does not increase the AC rating of the combined facility, does not violate PURPA's 80 MW QF certification threshold, even if the combined facility's capacity is greater than 80MW. The appropriate pricing structure to apply to a qualifying facility that includes storage is a commercial and contractual question for the Commission to determine, but the facility itself, when configured such that the total AC output of the facility is limited to the AC rating of the primary generating equipment, should be considered a single qualifying facility sized according to the AC rating of the primary generating equipment.

Q. Why did you include reference to FERC Order No. 845 in your testimony and with respect to the Storage Tariff?

A. Although FERC does not have jurisdiction with respect to the Storage Tariff, FERC rules often form the basis of rules adopted by other jurisdictions and offer guidance when addressing emerging interconnection issues. The purpose of Order No. 845 – to remove inefficiencies that result when a facility is forced to comply with transmission upgrade requirements for capacity that the facility does not need and will not use – is relevant here. DESC is proposing that the total interconnection service capacity must be the aggregate nameplate capacity of the generator and the energy storage unit, even when the Storage Facility is physically incapable of exceeding the Solar QF capacity (in a DC-coupled energy storage design, for example). This results in inefficiencies and unnecessary, excess costs being borne by developers. To avoid this, the interconnection service capacity studied by DESC should be the interconnection service capacity applied for at the point of interconnection.

Q. Can you provide an example of the technical capabilities of a Storage Facility to alleviate the objections of Witness Kassis on using power from the Storage Facility to satisfy contractual obligations that begin on Page 10, Line 20?

A. Yes, here is an example. Many Battery Energy Storage Systems (BESS's) are capable of simultaneously firming Solar QF output while charging and discharging. This would not impact the capacity available to DESC from the Storage Facility, so DESC's right to send dispatch signals to the Storage Facility to discharge such capacity are not affected. In fact, not allowing the Storage Facility to provide this service results in unnecessary costs to the ratepayer as DESC will have to use other assets to address any Solar QF volatility. The assumption that satisfying other contractual obligations will necessarily result in the facility owner being "overcompensated" is not true.

Q. Did Witness Kassis misinterpret your direct testimony as it relates to the interplay between the storage tariff and negotiated storage PPAs?

A. Yes. In my direct testimony, I recommend that DESC, with the Commission's approval, needs to establish how QFs proceeding under the Storage Tariff or adding storage under a PURPA PPA will be prioritized for purchase price enhancements resulting from storage. The point of this recommendation was to recognize, as Witness Kassis and Witness Bell both point out in their direct and rebuttal testimony, that as additional storage resources are added to the DESC system, the value of additional storage resources will be impacted. Currently, it is not clear whether the 100MW of storage capacity evaluated for purposes of calculating the Storage Tariff will impact the value of other negotiated storage PPAs. In other words, upon approval of the Storage Tariff, does DESC intend to assume 100MW of storage is already operational when it models rates for a negotiated PPA that includes storage?

II. Responses to Witness Bell

Q. Do you agree with Witness Bell that adding storage to existing solar projects would be "double-counting"?

A. Not necessarily. Because the Storage Tariff is designed to compensate output from the storage facility separately from output from the solar facility, overpayment concerns would only arise in a case where the total annual output from the facility was greater than it otherwise would have been without the storage addition. This could occur in an instance where the storage facility was capturing clipped energy from the solar facility that would otherwise not be delivered to the grid. By either disallowing the capture of clipped energy,

or compensating that clipped energy at current avoided cost rates, any concerns over "double-counting" would be alleviated.

Q. Do you agree with Witness Bell that "overpayment" is already occurring with regard to older solar PPAs?

A. No. As acknowledged by Witness Kassis and Witness Bell in their testimony, the avoided cost rates will change over time as new resources are added to the DESC system. The higher rates paid under older PPAs reflect the higher value of those earlier resources to the DESC system.

Q. Can you elaborate on why the Storage Tariff needs to accurately cap the annual cycling requirement, instead of just assuming 365 cycles per year, to be commercially reasonable in response to Witness Bell's testimony starting on Page 9 Line 1?

A. Yes. BESS costs, and corresponding performance guarantees from battery vendors, typically increase with the number of cycles required for the term of the project. Aligning the capability of the BESS with how it will actually be used in an application is important to maintain commercial reasonableness. For example, if 365 cycles per year are specified when only 180 cycles per year are actually needed, the cost of the Storage QF will be unnecessarily inflated because more cycles are paid for than are needed. DESC would not be able to justify overpaying for a battery unit that it procured directly due to this mismatch, and therefor neither should a third party under the Tariff. We request DESC share the modeling results that show the average number of cycles per year the Storage QF resource will actually be used, and that the cycling capability required under the Tariff be modified accordingly.

Q. Does this conclude your testimony?

A. Yes.